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## FEDERAL BORROWING AND DEBT

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## 12. FEDERAL BORROWING AND DEBT

Debt is the largest legally binding obligation of the Federal Government. At the end of 1998 the Government owed \$3,720 billion of principal to the people who had loaned it the money to pay for past deficits. The gross Federal debt, which also includes the securities held by trust funds and other Government accounts, was \$5,479 billion. This year the Government is estimated to pay around \$234 billion of interest to the public on its debt.

After 28 consecutive years of deficits financed mainly by borrowing from the public, the Government had a \$69 billion surplus in 1998 and repaid \$51 billion of debt held by the public. This was a large improvement in its fiscal position from the record \$290 billion deficit in 1992. The steady decline in deficits since that year and the eventual surplus were due in large part to

the strong economic expansion and the budget discipline of the Omnibus Budget Reconciliation Act of 1993. The surpluses projected in this budget would substantially reduce Federal debt held by the public over the next few years both in dollar amount and relative to the size of the Nation's gross domestic product (GDP).

The tables and text in this chapter do not reflect the President's proposed reform of the social security system, which would affect the borrowing and debt estimates from 2000 onwards. Borrowing and debt estimates based on his proposal are, however, presented in Table S-14 of the main budget volume, *Budget of the United States Government, Fiscal Year 2000*.

TABLE 12-1. TRENDS IN FEDERAL DEBT HELD BY THE PUBLIC

(Dollar amounts in billions)

Fiscal year	Debt held by the public		Debt held by the public as a percent of:		Interest on debt held by the public as a percent of: <sup>3</sup>	
	Current dollars	FY 1992 dollars <sup>1</sup>	GDP	Credit market debt <sup>2</sup>	Total outlays	GDP
1950 .....	219.0	1,210.1	80.1	55.3	11.4	1.8
1955 .....	226.6	1,098.5	57.3	43.3	7.6	1.3
1960 .....	236.8	1,019.5	45.7	33.8	8.5	1.5
1965 .....	260.8	1,049.0	38.0	26.9	8.1	1.4
1970 .....	283.2	946.2	28.1	20.8	7.9	1.5
1975 .....	394.7	969.5	25.4	18.4	7.5	1.6
1980 .....	709.8	1,197.0	26.1	18.5	10.6	2.3
1981 .....	785.3	1,206.2	25.8	18.5	12.0	2.7
1982 .....	919.8	1,319.3	28.6	19.8	13.6	3.1
1983 .....	1,131.6	1,551.2	33.1	21.9	13.8	3.3
1984 .....	1,300.5	1,716.8	34.1	22.1	15.7	3.5
1985 .....	1,499.9	1,913.6	36.6	22.3	16.2	3.7
1986 .....	1,736.7	2,154.7	39.7	22.6	16.1	3.6
1987 .....	1,888.7	2,277.4	41.0	22.3	16.0	3.5
1988 .....	2,050.8	2,390.2	41.4	22.3	16.2	3.5
1989 .....	2,189.9	2,448.7	40.9	22.0	16.5	3.5
1990 .....	2,410.7	2,587.2	42.4	22.6	16.2	3.6
1991 .....	2,688.1	2,767.0	45.9	24.1	16.2	3.7
1992 .....	2,998.8	2,998.8	48.8	25.7	15.5	3.5
1993 .....	3,247.5	3,163.9	50.2	26.5	14.9	3.2
1994 .....	3,432.1	3,264.6	50.1	26.8	14.4	3.1
1995 .....	3,603.4	3,347.3	50.1	26.6	15.8	3.3
1996 .....	3,733.0	3,400.7	49.4	26.2	15.8	3.3
1997 .....	3,771.1	3,372.5	47.2	25.3	15.7	3.1
1998 .....	3,719.9	3,286.7	44.3	23.4	15.1	3.0
1999 estimate .....	3,669.7	3,201.1	41.9	.....	13.6	2.7
2000 estimate .....	3,571.8	3,053.3	39.2	.....	12.5	2.4
2001 estimate .....	3,455.0	2,891.7	36.4	.....	11.8	2.2
2002 estimate .....	3,285.0	2,692.6	33.2	.....	11.1	2.0
2003 estimate .....	3,119.3	2,504.7	30.2	.....	10.1	1.9
2004 estimate .....	2,926.4	2,301.2	27.1	.....	9.3	1.7

<sup>1</sup> Debt in current dollars deflated by the GDP chain-type price index with fiscal year 1992 equal to 100.

<sup>2</sup> Total credit market debt owed by domestic nonfinancial sectors, modified to be consistent with budget concepts for the measurement of Federal debt. Financial sectors are omitted to avoid double counting, since financial intermediaries borrow in the credit market primarily in order to finance lending in the credit market. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

<sup>3</sup> Interest on debt held by the public is estimated as the interest on the public debt less the "interest received by trust funds" (subfunction 901 less subfunctions 902 and 903). It does not include the comparatively small amount of interest on agency debt or the offsets for interest on public debt received by other Government accounts (revolving funds and special funds).

### Trends in Federal Debt

Federal debt held by the public has increased five-fold since 1980, as shown in Table 12-1. In 1980 it was \$709.8 billion; by the end of 1998 it stood at \$3,719.9 billion. The data in this table are supplemented for earlier years by Tables 7.1-7.3 in *Historical Tables*, which is published as a separate volume of the budget.

After the end of World War II, Federal debt peaked at 109 percent of GDP in 1946. From then until the 1970s, Federal debt grew gradually, but, due to inflation, it declined in real terms. Because of an expanding economy as well as inflation, Federal debt as a percentage of GDP decreased almost every year. With households borrowing heavily to buy homes and consumer durables, and with businesses borrowing heavily to buy plant and equipment, Federal debt also decreased almost every year as a percentage of the total credit market debt outstanding. The cumulative effect was impressive. From 1950 to 1975, debt held by the public declined from 80.1 percent of GDP to 25.4 percent, and from 55.3 percent of credit market debt to 18.4 percent. Despite rising interest rates, interest outlays became a smaller share of the budget and were roughly stable as a percentage of GDP.

During the 1970s, large budget deficits emerged as the economy was disrupted by oil shocks and inflation. The nominal amount of Federal debt more than doubled, and, despite high inflation, the real value of Federal debt increased by a fourth. Federal debt relative to GDP and credit market debt stopped declining after the middle of the decade.

The growth of Federal debt held by the public accelerated during the early 1980s due to very large budget deficits. Since the deficits continued to be large until recently, debt continued to grow substantially. With inflation reduced, the rapid growth in nominal debt meant a rapid growth in real debt as well. The ratio of Federal debt to GDP rose from 26.1 percent in 1980 to 50.2 percent in 1993, the highest ratio since the mid-1950s. The ratio of Federal debt to credit market debt also rose, though to a much lesser extent, from 18.5 percent to 26.5 percent. Interest outlays on debt held by the public, calculated as a percentage of both total Federal outlays and GDP, increased by about two-fifths.

The growth of Federal debt held by the public was decelerating by this time, however, and in 1998 the amount of debt outstanding fell for the first time since the last budget surplus in 1969. Since 1994 the debt has declined considerably relative to both GDP and total credit market debt. Table 12-1 shows that debt as a percentage of GDP is estimated to decline significantly more in the next few years, falling from 44.3 percent in 1998 to 27.1 percent in 2004. The improvement in the last few years reflects the deficit reduction package enacted by the Omnibus Budget Reconciliation Act of 1993 and the long economic expansion. The further estimated improvement reflects the Balanced Budget Act of 1997 and the expectation that economic

growth will continue at a steady pace without accelerating inflation for the foreseeable future.<sup>1</sup> Interest outlays on the debt held by the public are estimated to decline by about one-third relative to both total outlays and GDP over the next few years.

### Debt Held by the Public, Gross Federal Debt, and Liabilities Other Than Debt

The Federal Government issues debt securities for two principal purposes. First, it borrows from the public in order to finance the Federal deficit. Second, it issues debt to Government accounts, primarily trust funds, that accumulate surpluses. By law, trust fund surpluses must generally be invested in Federal securities. The gross Federal debt is defined to consist of both the debt held by the public and the debt held by Government accounts. Nearly all the Federal debt has been issued by the Treasury and is formally called "public debt," but a small portion has been issued by other Government agencies and is called "agency debt."<sup>2</sup>

Borrowing from the public, whether by the Treasury or by some other Federal agency, has a significant impact on the economy. Borrowing from the public is normally a good approximation to the Federal demand on credit markets. Even if the proceeds are used productively for tangible or intangible investment, the Federal demand on credit markets has to be financed out of the saving of households and businesses, the State and local sector, or the rest of the world.<sup>3</sup> Federal borrowing thereby competes with the borrowing of other sectors for financial resources in the credit market, which affects interest rates and private capital accumulation. Borrowing from the public thus affects the size and composition of assets held by the private sector and the perceived wealth of the public. It also affects the amount of taxes required to pay interest to the public on Federal debt. Borrowing from the public is therefore an important concern of Federal fiscal policy.<sup>4</sup>

Issuing debt securities to Government accounts performs an essential function in accounting for the operation of these funds. The balances of debt represent the cumulative surpluses of these funds due to the excess of their tax receipts and other collections compared

<sup>1</sup> Chapter 1 of this volume, "Economic Assumptions," reviews recent economic developments and explains the economic assumptions for this budget.

<sup>2</sup> The term "agency debt" is defined more narrowly in the budget than in the securities market, where it includes not only the debt of the Federal agencies listed in Table 12-3 but also the debt of the Government-sponsored enterprises listed in Table 8-10 at the end of Chapter 8 and certain Government-guaranteed securities.

<sup>3</sup> The Federal sector of the national income and product accounts provides a better measure of the deficit for analyzing the effect of Federal fiscal policy on national saving than the budget deficit or Federal borrowing from the public. The Federal sector and its differences from the budget are discussed in chapter 16 of this volume, "National Income and Product Accounts." Also see chapter 6 of this volume, Part IV, the section on the analysis of saving and investment.

<sup>4</sup> Debt held by the public was measured until 1988 as the par value (or face value) of the security, which is the principal amount due at maturity. The only exception was savings bonds. However, most Treasury securities are sold at a discount from par, and some are sold at a premium. Treasury debt held by the public is now measured as the sales price plus the amortized discount (or less the amortized premium). At the time of sale, the value equals the sales price. Subsequently, the value equals the sales price plus the amount of the discount that has been amortized up to that time. In equivalent terms, the measured value of the debt equals par less the unamortized discount. (For a security sold at a premium, the definition is symmetrical.) Agency debt, except for zero-coupon certificates, is recorded at par. For further analysis of these concepts, see Special Analysis E, "Borrowing and Debt," in *Special Analyses, Budget of the United States Government, Fiscal Year 1990*, pp. E-5 to E-8, although some of the practices it describes have been changed. In 1997 Treasury began to sell inflation-protected notes and bonds. The recorded value of these securities includes a periodic adjustment for inflation.

Table 12-2. FEDERAL GOVERNMENT FINANCING AND DEBT <sup>1</sup>

(In billions of dollars)

	1998 Actual	Estimate					
		1999	2000	2001	2002	2003	2004
<b>Financing:</b>							
Surplus or deficit (–) .....	69.2	79.3	117.3	134.1	186.7	182.0	207.6
(On-budget) .....	–29.9	–41.7	–12.2	0.2	44.4	31.4	49.8
(Off-budget) .....	99.2	121.0	129.5	133.9	142.3	150.7	157.8
Means of financing other than borrowing from the public:							
Changes in: <sup>2</sup>							
Treasury operating cash balance .....	4.7	–1.1	.....	.....	.....	.....	.....
Checks outstanding, etc. <sup>3</sup> .....	–10.5	–3.7	–0.1	.....	.....	.....	.....
Deposit fund balances .....	–0.8	–1.7	.....	.....	.....	.....	.....
Seigniorage on coins .....	0.6	0.9	1.0	1.0	1.0	1.0	1.0
Less: Net financing disbursements:							
Direct loan financing accounts .....	–11.5	–25.2	–21.2	–20.1	–19.6	–19.2	–17.7
Guaranteed loan financing accounts .....	–0.5	1.6	0.9	1.8	1.8	1.8	2.0
Total, means of financing other than borrowing from the public .....	–18.0	–29.1	–19.4	–17.3	–16.7	–16.4	–14.7
Total, repayment of debt held by the public .....							
Change in debt held by the public .....	–51.3	–50.1	–97.9	–116.8	–170.1	–165.7	–192.9
<b>Debt Outstanding, End of Year:</b>							
Gross Federal debt:							
Debt issued by Treasury .....	5,449.3	5,586.6	5,683.9	5,754.9	5,789.9	5,831.5	5,851.6
Debt issued by other agencies .....	29.4	28.4	27.5	26.4	25.5	24.1	22.8
Total, gross Federal debt .....	5,478.7	5,614.9	5,711.4	5,781.4	5,815.3	5,855.6	5,874.4
Held by:							
Government accounts .....	1,758.8	1,945.2	2,139.5	2,326.3	2,530.4	2,736.3	2,947.9
The public .....	3,719.9	3,669.7	3,571.8	3,455.0	3,285.0	3,119.3	2,926.4
Federal Reserve Banks <sup>4</sup> .....	458.1						
Other .....	3,261.7						
<b>Debt Subject to Statutory Limitation, End of Year:</b>							
Debt issued by Treasury .....	5,449.3	5,586.6	5,683.9	5,754.9	5,789.9	5,831.5	5,851.6
Less: Treasury debt not subject to limitation <sup>5</sup> .....	–15.5	–15.5	–15.5	–15.5	–15.5	–15.5	–15.5
Agency debt subject to limitation .....	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Adjustment for discount and premium <sup>6</sup> .....	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Total, debt subject to statutory limitation <sup>7</sup> .....	5,439.4	5,576.6	5,673.9	5,744.9	5,779.9	5,821.5	5,841.6

<sup>1</sup> Treasury securities held by the public and zero-coupon bonds held by Government accounts are almost entirely measured at sales price plus amortized discount or less amortized premium. Agency debt is almost entirely measured at face value. Treasury securities in the Government account series are measured at face value less unrealized discount (if any).

<sup>2</sup> A decrease in the Treasury operating cash balance (which is an asset) would be a means of financing the deficit and therefore has a positive sign. An increase in checks outstanding or deposit fund balances (which are liabilities) would also be a means of financing the deficit and therefore has a positive sign.

<sup>3</sup> Besides checks outstanding, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.

<sup>4</sup> Debt held by the Federal Reserve Banks is not estimated for future years.

<sup>5</sup> Consists primarily of Federal Financing Bank debt.

<sup>6</sup> Consists of unamortized discount (less premium) on public issues of Treasury notes and bonds (other than zero-coupon bonds) and unrealized discount on Government account series securities.

<sup>7</sup> The statutory debt limit is \$5,950 billion.

to their spending. These balances can be used in later years for future payments to the public. The interest on the debt compensates these funds—and the members of the public who pay earmarked taxes or user fees into these funds—for spending some of their collections at a later time than when they receive the money. Public policy may deliberately run surpluses and accumulate debt in trust funds and other Government accounts in anticipation of future spending.

However, issuing debt to Government accounts does not have any of the economic effects of borrowing from the public. It is an internal transaction between two accounts, both within the Government itself. It is not a current transaction of the Government with the public; it does not compete with the private sector for available funds in the credit market; it does not provide the account with resources other than a claim on the U.S. Treasury; and it does not represent the estimated amount of the account's future transactions with the

public. For example, if the account records the transactions of a social insurance program, the debt that it holds does not represent the actuarial present value of expected future benefits for either the current participants or a larger group. The future transactions of Federal social insurance and employee retirement programs, which own over four-fifths of the debt held by Government accounts, are important in their own right and need to be considered separately. This can be done through information published in actuarial and financial reports for these programs.<sup>5</sup> Debt held by the public is therefore a better concept than gross Federal debt for analyzing the effect of the budget on the economy.

Debt securities do not encompass all the liabilities of the Federal Government. For example, accounts payable occur in the normal course of buying goods and services; social security benefits are due as of the end of the month but, according to statute, are payable as of the beginning of the next month; loan guarantee liabilities are incurred when the Government guarantees the payment of interest and principal on private loans; and liabilities for future pension payments are incurred as part of the current compensation for the services performed by Federal civilian and military employees in producing Government outputs. Like debt securities sold in the credit market, these liabilities have their own distinctive effects on the economy. Federal liabilities are analyzed within the broader conceptual framework of Federal resources and responsibilities in chapter 2 of this volume, "Stewardship: Toward a Federal Balance Sheet."<sup>6</sup> The different types of liabilities are reported annually in the financial statements of the major Federal agencies and in the *Consolidated Financial Statements of the United States Government*.<sup>7</sup>

### Borrowing and Government Deficits

Table 12-2 summarizes Federal borrowing and debt from 1998 through 2004. In 1998 the Government repaid \$51.3 billion of debt held by the public, and the debt outstanding decreased to \$3,719.9 billion. The Treasury issued \$160.3 billion of debt to Government accounts, and gross Federal debt increased to \$5,347.7 billion. Table S-14 in the main budget volume summarizes Federal borrowing and debt in the same way as Table 12-2 but reflects the President's proposal to reform the social security system in the estimates for 2000-2004.

Borrowing from the public depends both on the Federal Government's expenditure programs and tax laws and on economic conditions. The sensitivity of the budget to economic conditions is analyzed in chapter 1 of this volume.

<sup>5</sup> Extensive actuarial analyses of the social security and medicare programs are published in the annual reports of the boards of trustees of these funds. A summary of actuarial estimates for these and other programs is prepared annually by the Financial Management Service, Department of the Treasury, in "Statement of Liabilities and Other Financial Commitments of the United States Government." The estimates in that report are not, however, all comparable with one another in concept or actuarial assumptions.

<sup>6</sup> The balance sheet in chapter 2 consolidates the Federal Reserve System with the rest of the Government, unlike the budget. As a result, the "debt held by the public" reported in that chapter, unlike the amounts reports in this chapter and elsewhere, is net of the Federal debt held by the Federal Reserve Banks.

<sup>7</sup> The *Consolidated Financial Statements* are published annually by the Financial Management Service, Department of the Treasury.

**Debt held by the public.**—Table 12-2 shows the relationship between borrowing from the public and the Federal surplus or deficit. The total surplus or deficit of the Federal Government includes both the on-budget surplus or deficit and also the surplus or deficit of the off-budget Federal entities, which have been excluded from the budget by law. Under present law the off-budget Federal entities are the social security trust funds (old-age and survivors insurance and disability insurance) and the Postal Service fund.<sup>8</sup> Social security, which comprises almost all of the off-budget totals, had a large surplus in 1998 and is estimated to have large and rising surpluses throughout the projection period. Its surplus more than offsets the on-budget deficit in 1998 and the estimated on-budget deficits in 1999 and 2000, as a result of which debt held by the public is repaid in these years. Beginning in 2001, when the on-budget accounts are estimated to also have a surplus, the social security surplus adds substantially to the amount of debt repaid.

The Government's ability to repay debt held by the public, or its need to borrow, depends on the size of the total surplus or deficit and on several other factors such as the net financing disbursements of credit programs and changes in the level of cash balances held by the Treasury. As shown in Table 12-2, these other factors—which are formally called "means of financing other than borrowing from the public"—can either increase or decrease the Government's repayment of debt. (An increase in its ability to repay debt is represented by a positive sign, like the surplus; a decrease is represented by a negative sign, like a deficit.) In 1998 the surplus was \$69.2 billion and the "other means of financing" were -\$18.0 billion, so the Government was able to repay \$51.3 billion of debt held by the public. In 1999 the surplus is estimated to grow to \$79.3 billion, but the "other means of financing" are estimated to grow even more, to \$29.1 billion. As a result, despite the growing surplus, the estimated repayment of debt held by the public decreases slightly to \$50.1 billion. In 2000 and later years, the estimated surplus increases substantially, as a result of which the Government repays large and generally increasing amounts of debt each year.

When the surplus or deficit is large, it is usually a good approximation to say that "the surplus is used to repay debt held by the public" or "the deficit is financed by borrowing from the public." Over the last 10 years, the cumulative deficit was \$1,616 billion and the increase in debt held by the public was \$1,669 billion—nearly equal amounts. The other factors added a total of \$53 billion of borrowing over that period, an average of \$5.3 billion per year. The variation was wide, ranging from additional borrowing of \$22 billion to reduced borrowing of \$18 billion. The other factors that affect borrowing do not depend on the size of the surplus or deficit. Thus, when the surplus or deficit is moderate in size, as in 1998, the other factors that

<sup>8</sup> For further explanation of the off-budget Federal entities, see chapter 19, "Off-Budget Federal Entities and Non-Budgetary Activities."

affect borrowing may account for a significant proportion of the change in Federal debt held by the public.

Many of these other factors are small in most years compared to borrowing from the public, even when the surplus or deficit is relatively small. This is because they are limited by their own nature. Decreases in cash balances, for example, are inherently limited by past accumulations, which themselves required financing when they were built up.

However, a new and larger factor that affects borrowing was created by the Federal Credit Reform Act of 1990. Budget outlays for direct loans and loan guarantees consist of the estimated subsidy cost of the loans or guarantees at the time when the direct loans or guaranteed loans are disbursed. The cash flows to and from the public resulting from these loans and guarantees are not costs to the Government above and beyond those costs already included in budget outlays. Therefore, they are non-budgetary in nature and are recorded as transactions of the non-budgetary financing account for each credit program.<sup>9</sup> The net cash flows of the financing accounts, including intragovernmental transactions as well as transactions with the public, are called "net financing disbursements." They are defined in the same way as the "outlays" of a budgetary account and therefore affect the ability to repay debt held by the public, or the requirements for borrowing from the public, in the same way as the surplus or deficit.

The net financing disbursements are partly due to intragovernmental transactions with budgetary accounts (the receipt of subsidy payment and the receipt or payment of interest) and partly due to transactions with the public (disbursement and repayment of loans, receipt of interest and fees, payment of default claims, and so forth). An intragovernmental transaction does not affect Federal borrowing from the public. (Although the surplus or deficit changes, the net financing disbursements change in an equal amount with the opposite sign, so the effects cancel out on a net basis.) On the other hand, financing account disbursements to the public increase the requirement for borrowing from the public in the same way as an increase in budget outlays for cash payments to the public. Financing account receipts from the public can be used to finance the payment of the Government's obligations and therefore reduce the requirement for Federal borrowing from the public in the same way as an increase in budget receipts.

In the early years of credit reform the financing accounts had little net effect on borrowing requirements, but their effect began to get large in 1995. The financing accounts added \$4.1 billion to borrowing requirements in 1995, \$11.7 billion in 1996, and \$20.9 billion in 1997. Although they added only \$12.0 billion in 1998, they are estimated to add \$16–24 billion every year during 1999–2004. The expansion was mainly because

of the growth of the direct student loan program. Since direct loans require cash disbursements equal to the full amount of the loans when the loans are made, Federal borrowing requirements are initially increased. Later, when the loans are repaid, Federal borrowing requirements will decrease.

***Debt held by Government accounts.***—The amount of Federal debt issued to Government accounts depends largely on the surpluses of the trust funds, both on-budget and off-budget, which owned 94 percent of the total Federal debt held by Government accounts at the end of 1998. In 2000, for example, the total trust fund surplus is estimated to be \$184.8 billion, and Government accounts are estimated to invest \$194.4 billion in Federal securities. The difference is because some revolving funds and special funds also hold Federal debt and because the trust funds may change the amount of their cash assets not currently invested. The amounts of debt held in major accounts and the annual investments are shown in Table 12–4.

### Agency Debt

Several Federal agencies, shown in Table 12–3, sell debt securities to the public and to other Government accounts. During 1998, agencies repaid \$0.6 billion of debt held by the public. Agency debt is only one percent of Federal debt held by the public.

The reason for issuing agency debt differs considerably from one agency to another. The predominant agency borrower is the Tennessee Valley Authority, which had sold \$23.5 billion of securities held by the public at the end of 1998, or 92 percent of the total for all agencies. TVA sells debt primarily to finance capital expenditures and to refund other issues of its existing debt.

The Federal Housing Administration, on the other hand, has for many years issued both checks and debentures as means of paying claims to the public that arise from defaults on FHA-insured mortgages. Issuing debentures to pay the Government's bills is equivalent to borrowing from the public and then paying the bills by disbursing the cash borrowed, so the transaction is recorded as being simultaneously an outlay and a borrowing. The debentures are therefore classified as agency debt. The borrowing by FHA and a few other agencies that have engaged in similar transactions is thus inherent in the way that their programs operate.<sup>10</sup>

Some types of lease-purchase contracts are equivalent to direct Federal construction financed by Federal borrowing. A number of years ago the Federal Government guaranteed the debt used to finance the construction of buildings for the National Archives and the Architect of the Capitol and has exercised full control over the design, construction, and operation of the buildings. The construction expenditures and interest were therefore

<sup>9</sup>The Federal Credit Reform Act of 1990 (sec. 505(b)) requires that the financing accounts be non-budgetary. As explained in chapter 19, "Off-Budget Federal Entities and Non-Budgetary Activities," they are non-budgetary in concept because they do not measure cost. For additional discussion of credit reform, see chapter 23 of this volume, "Budget System and Concepts and Glossary," and the other references cited in chapter 19.

<sup>10</sup>The debt securities of the FSLIC Resolution fund and Department of the Interior were also issued as a means of paying specified bills. The budgetary treatment of these and similar securities is further explained in Special Analysis E of the 1989 *Budget*, pp. E-25 to E-26; and Special Analysis E of the 1988 *Budget*, pp. E-27 to E-28.

TABLE 12-3. AGENCY DEBT

(In millions of dollars)

	Borrowing or repayment (-) of debt			Debt end of 2000 estimate
	1998 actual	1999 estimate	2000 estimate	
<b>Borrowing from the public:</b>				
Housing and Urban Development:				
Federal Housing Administration .....	105	-110	.....	64
Interior .....	.....	.....	.....	13
Small Business Administration:				
Participation certificates: Section 505 development company .....	.....	.....	.....	7
Architect of the Capitol .....	-2	-2	-2	173
Farm Credit System Financial Assistance Corporation .....	.....	-397	-89	775
Federal Deposit Insurance Corporation:				
FSLIC Resolution Fund .....	-32	.....	.....	63
National Archives .....	-5	-5	-6	271
Tennessee Valley Authority .....	-701	2,776	-701	25,560
<b>Total, borrowing from the public .....</b>	<b>-634</b>	<b>2,262</b>	<b>-798</b>	<b>26,927</b>
<b>Borrowing from other funds:</b>				
Postal Service Fund <sup>1</sup> .....	-3,181	-83	-83	551
Tennessee Valley Authority <sup>1</sup> .....	.....	-3,200	.....	.....
<b>Total, borrowing from other funds .....</b>	<b>-3,181</b>	<b>-3,283</b>	<b>-83</b>	<b>551</b>
<b>Total, agency borrowing .....</b>	<b>-3,814</b>	<b>-1,021</b>	<b>-881</b>	<b>27,478</b>

<sup>1</sup>The Postal Service and TVA debt held by other funds is the result of the FFB swapping Postal Service and TVA securities with the Civil Service Retirement and Disability trust fund during 1996 in exchange for Treasury securities having an equal present value. See the narrative for further explanation.

classified as Federal outlays, and the borrowing was classified as Federal agency borrowing from the public.

The proper budgetary treatment of lease-purchases was further examined in connection with the Budget Enforcement Act of 1990. Several changes were made. Among other decisions, it was determined that outlays for a lease-purchase in which the Government assumes substantial risk will be recorded in an amount equal to the asset cost over the period during which the contractor constructs, manufactures, or purchases the asset; if the asset already exists, the outlays will be recorded when the contract is signed. Agency borrowing will be recorded each year to the extent of these outlays. The agency debt will subsequently be redeemed over the lease payment period by a portion of the annual lease payments. This rule was effective starting in 1991. However, no lease-purchase agreements in which the Government assumes substantial risk have yet been authorized or are estimated for 1999 or 2000. The budgetary treatment was reviewed in connection with the Balanced Budget Act of 1997. Some clarifications were made but no substantive changes from existing practice.

The amount of agency securities sold to the public has been reduced by borrowing from the Federal Financing Bank (FFB). The FFB is an entity within the Treasury Department, one of whose purposes is to substitute Treasury borrowing for agency borrowing from the public. It has the authority to purchase agency debt and finance these purchases by borrowing from the Treasury. Agency borrowing from the FFB is not included in gross Federal debt. It would be double

counting to add together (a) the agency borrowing from the FFB and (b) the Treasury borrowing from the public that was needed to provide the FFB with the funds to lend to the agencies.

The debt of the agencies that borrow from the FFB is not subject to the statutory debt limitation. This enabled Treasury to raise additional cash to avoid default during the dispute with Congress over the budget and the debt limit three years ago. On February 14, 1996, FFB swapped most of its holdings of TVA and Postal Service debt to the Civil Service Retirement and Disability trust fund (CSRDF) in exchange for Treasury securities. The Treasury securities, which were subject to the debt limit, were canceled in an exchange that took place between the FFB and the Treasury immediately afterwards. This reduced the amount of debt subject to limit, which allowed Treasury to sell to the public more securities that are subject to the debt limit.

The TVA and Postal Service securities acquired by CSRDF are included in gross Federal debt shown in Table 12-2, are included in Table 12-3 as amounts that agencies borrowed from other funds, and are included in Table 12-4 as agency debt held by Government accounts. Including agency debt held by Government accounts in gross Federal debt is not double counting, because Treasury did not have to borrow from the public in order for these accounts to buy the securities. Moreover, the TVA and Postal Service securities acquired by CSRDF replaced Treasury securities, which had been counted in gross Federal debt. It is assumed for purposes of the budget estimates that CSRDF will hold the agency debt until maturity (or call date), at



which time the principal repayments will be invested in Treasury securities.<sup>11</sup>

TVA prepaid its entire \$3.2 billion of debt securities held by CSRDF in October 1998. The Omnibus Consolidated and Emergency Appropriations Act of 1999 permitted TVA to prepay this debt at par and provided an appropriation to FFB to cover the prepayment charge otherwise owed. (The appropriation to FFB was used to make CSRDF whole.) The Act also prohibited TVA from borrowing from the FFB in the future. TVA financed the prepayment by borrowing from the public. As a result, its debt held by the public is estimated to increase \$2.8 billion in 1999, while its total debt decreases by \$0.4 billion.

### Debt Held by Government Accounts

Trust funds, and some public enterprise revolving funds and special funds, accumulate cash in excess of current requirements in order to meet future obligations. These cash surpluses are invested mostly in Treasury debt and, to a very small extent, in agency debt.

Investment by trust funds and other Government accounts was around \$10 billion per year in the early 1980s. Primarily due to the Social Security Amendments of 1983, the creation of the military retirement trust fund, and an expanding economy, annual investment has risen greatly since then. It was \$160.3 billion in 1998, as shown in Table 12-4, and it is estimated to rise to \$194.4 billion in 2000. The holdings of Federal securities by Government accounts are estimated to grow to \$2,139.5 billion by the end of 2000, or 37 percent of the gross Federal debt. This percentage is estimated to rise further in the following years as the budget surpluses reduce the debt held by the public.

The large investment by Government accounts is concentrated among a few trust funds. The two social security trust funds—old-age and survivors insurance and disability insurance—have a large combined surplus and invest an increasing amount each year: a total of \$352.5 billion during 1998–2000, which constitutes 65 percent of the total estimated investment by Government accounts.

In addition to these two funds, the largest investment is by the Federal employee retirement and disability trust funds. The principal trust fund for Federal civilian employees is the civil service retirement and disability trust fund, which accounts for 18 percent of the total investment by Government accounts during 1998–2000. The military retirement trust fund accounts for 4 percent. Altogether, social security and these two retirement funds account for 87 percent of the investment by all Government accounts during this period. At the end of 2000, they are estimated to own 77 percent of the total debt held by Government accounts. The largest other holdings are by the hospital insurance trust fund, which invested heavily in the past, and the unemployment trust fund.

The Transportation Equity Act for the 21st Century (TEA-21), which the President signed in June 1998, increased Federal spending for highway programs and established a linkage between future trust fund tax receipts and highway spending. The Act also changed the investments and investment policy of the trust fund. It provided that highway account balances in excess of \$8 billion would be transferred to the general fund as of September 30, 1998. (This did not affect the mass transit account within the highway trust fund.) The amount of this transfer was \$8.1 billion. It also provided that as of October 1998 the interest on any obligation held by the highway trust fund would not be credited to the fund. The Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999 subsequently amended this provision to say that the obligations held by the trust fund would not bear interest.

*Technical note on measurement.*—The Treasury securities held by Government accounts consist almost entirely of the Government account series. Most were issued at par value (face value), and the securities issued at a discount or premium have traditionally been recorded at par in the OMB and Treasury reports on Federal debt. However, there have recently been two exceptions. First, in 1991 Treasury began to issue zero-coupon bonds to the Pension Benefit Guaranty Corporation (PBGC). Because the purchase price was a small fraction of par value and the amounts were large, the PBGC holdings were recorded at purchase price plus amortized discount. These securities were redeemed during 1994.

<sup>11</sup> For further discussion of the debt limit dispute and the swap of securities between the FFB and CSRDF, see *Analytical Perspectives, Budget of the United States Government, Fiscal Year 1998*, pp. 222 and 225.

TABLE 12-4. DEBT HELD BY GOVERNMENT ACCOUNTS <sup>1</sup>

(In millions of dollars)

Description	Investment or disinvestment (-)			Holdings end of 2000 estimate
	1998 actual	1999 estimate	2000 estimate	
<b>Investment in Treasury debt:</b>				
Energy: Nuclear waste disposal fund .....	4,921	-2,855	983	9,297
Health and Human Services:				
Federal hospital insurance trust fund .....	1,629	-617	6,340	123,973
Federal supplementary medical insurance trust fund .....	5,037	6,697	-808	45,391
Vaccine injury compensation trust fund .....	29	111	118	1,514
Housing and Urban Development:				
Federal Housing Administration mutual mortgage fund .....	877	1,800	2,500	18,644
Other HUD .....	65	708	677	7,008
Interior:				
Outer Continental Shelf deposit funds .....	59	-1,680	.....	76
Abandoned Mine Reclamation fund .....	114	136	108	1,912
Labor:				
Unemployment trust fund .....	8,718	7,200	6,259	84,100
Pension Benefit Guaranty Corporation .....	937	837	1,040	10,574
State: Foreign Service retirement and disability trust fund .....	572	589	603	10,742
Transportation:				
Highway trust fund .....	-4,415	9,832	938	28,696
Airport and airway trust fund .....	2,189	3,746	1,554	13,850
Oil spill liability trust fund .....	-49	-43	268	1,344
Treasury: Exchange stabilization fund .....	521	877	270	17,128
Veterans Affairs:				
National service life insurance trust fund .....	-14	-134	-223	11,651
Other trust funds .....	21	5	10	1,774
Federal funds .....	-5	-12	-15	531
Defense-Civil:				
Military retirement trust fund .....	7,821	6,146	7,126	147,115
Harbor maintenance trust fund .....	108	614	.....	1,889
Environmental Protection Agency:				
Hazardous substance trust fund .....	-582	-851	1,004	5,449
Leaking underground storage tank trust fund .....	134	207	189	1,630
International Assistance Programs:				
Overseas Private Investment Corporation .....	306	359	57	3,258
Office of Personnel Management:				
Civil Service retirement and disability trust fund <sup>2</sup> .....	32,353	33,532	29,711	510,000
Employees life insurance fund .....	1,338	1,323	1,467	22,167
Employees health benefits fund .....	-522	-245	-127	5,893
Social Security Administration:				
Federal old-age and survivors insurance trust fund <sup>3</sup> .....	85,837	106,941	113,262	873,485
Federal disability insurance trust fund <sup>3</sup> .....	13,434	15,014	18,028	110,038
Farm Credit System Insurance Corporation:				
Farm Credit Insurance Fund .....	146	99	104	1,519
Federal Deposit Insurance Corporation:				
Bank Insurance fund .....	1,116	788	791	29,024
FSLIC Resolution fund .....	281	142	53	2,282
Savings Association Insurance fund .....	337	434	313	10,349
National Credit Union Administration: Share insurance fund .....	206	192	199	4,269
Postal Service fund <sup>3</sup> .....	140	-*	.....	1,000
Railroad Retirement Board trust funds .....	2,572	-3,854	905	18,862
Other Federal funds .....	491	1,318	923	8,120
Other trust funds .....	434	275	-191	5,133
Unrealized discount <sup>1</sup> .....	-3,688	.....	.....	-10,688
<b>Total, investment in Treasury debt <sup>1</sup> .....</b>	<b>163,468</b>	<b>189,634</b>	<b>194,436</b>	<b>2,138,999</b>
<b>Investment in agency debt:</b>				
Office of Personnel Management:				
Civil Service retirement and disability trust fund <sup>2</sup> .....	-3,181	-3,283	-83	551
<b>Total, investment in agency debt .....</b>	<b>-3,181</b>	<b>-3,283</b>	<b>-83</b>	<b>551</b>
<b>Total, investment in Federal debt <sup>1</sup> .....</b>	<b>160,287</b>	<b>186,351</b>	<b>194,353</b>	<b>2,139,550</b>
<b>MEMORANDUM</b>				
Investment by Federal funds (on-budget) .....	10,312	4,823	8,003	123,915
Investment by Federal funds (off-budget) .....	140	-*	.....	1,000
Investment by trust funds (on-budget) .....	54,192	61,253	55,060	1,041,724

TABLE 12-4. DEBT HELD BY GOVERNMENT ACCOUNTS <sup>1</sup>—Continued

(In millions of dollars)

Description	Investment or disinvestment (–)			Holdings end of 2000 estimate
	1998 actual	1999 estimate	2000 estimate	
Investment by trust funds (off-budget) .....	99,271	121,956	131,290	983,523
Investment by deposit funds <sup>4</sup> .....	59	–1,680	.....	76
Unrealized discount <sup>1</sup> .....	–3,688	.....	.....	–10,688

<sup>1</sup>\$500 thousand or less.<sup>2</sup>Debt held by Government accounts is measured at face value except for the unrealized discount on Government account series securities, which is not distributed by account. Changes in the unrealized discount are not estimated.<sup>3</sup>The investment in agency debt is the result of the FFB swapping Postal Service and TVA securities with the Civil Service Retirement and Disability trust fund during 1996 in exchange for Treasury securities having an equal present value. See the narrative in the section on agency debt for further explanation.<sup>4</sup>Off-budget Federal entity.<sup>5</sup>Only those deposit funds classified as Government accounts.

Second, in September 1993 Treasury also began to subtract the unrealized discount on other Government account series securities in calculating “net federal securities held as investments of government accounts.” Unlike the discount recorded for PBGC or for debt held by the public, this discount is the amount at the time of issue and is not amortized over the term of the security. In Table 12-4 it is shown as a separate item at the end of the table and not distributed by account.

### Limitations on Federal Debt

**Definition of debt subject to limit.**—Statutory limitations have normally been placed on Federal debt. Until World War I, the Congress ordinarily authorized a specific amount of debt for each separate issue. Beginning with the Second Liberty Bond Act of 1917, however, the nature of the limitation was modified in several steps until it developed into a ceiling on the total amount of most Federal debt outstanding. The latter type of limitation has been in effect since 1941. The limit currently applies to most debt issued by the Treasury since September 1917, whether held by the public or by Government accounts; and other debt issued by Federal agencies that, according to explicit statute, is guaranteed as to principal and interest by the United States Government.

The lower part of Table 12-2 compares total Treasury debt with the amount of Federal debt that is subject to the limit. Most of the Treasury debt not subject to limit was issued by the FFB (Federal Financing Bank). It is authorized to have outstanding up to \$15 billion of publicly issued debt, and this amount was issued several years ago to the Civil Service Retirement and Disability trust fund. The remaining Treasury debt not subject to limit consists almost entirely of silver certificates and other currencies no longer being issued.

The sole type of agency debt currently subject to the general limit is the debentures issued by the Federal Housing Administration, which were only \$174 million at the end of 1998. Some of the other agency debt, however, is subject to its own statutory limit. For example, the Tennessee Valley Authority is limited to \$30 billion of securities outstanding.

The comparison between Treasury debt and debt subject to limit also includes an adjustment for measurement differences in the treatment of discounts and pre-

miums. As explained elsewhere in this chapter, debt securities may be sold at a discount or premium, and the measurement of debt may take this into account rather than recording the face value of the securities. However, the measurement differs between gross Federal debt (and its components) and the statutory definition of debt subject to limit. An adjustment is needed to derive debt subject to limit (as defined by law) from Treasury debt, and this adjustment is defined in footnote 5 to Table 12-2. The amount is relatively small: \$5.5 billion at the end of 1998 compared to the total discount (less premium) of \$76.8 billion on all Treasury securities.

**Methods of changing the debt limit.**—The statutory debt limit has frequently been changed. Since 1960, Congress has passed 68 separate acts to raise the limit, extend the duration of a temporary increase, or revise the definition.<sup>12</sup>

The statutory limit can be changed by normal legislative procedures. It can also be changed as a consequence of the annual congressional budget resolution, which is not itself a law. The budget resolution includes a provision specifying the appropriate level of the debt subject to limit at the end of each fiscal year. The rules of the House of Representatives provide that, when the budget resolution is adopted by both Houses of the Congress, the vote in the House of Representatives is deemed to have been a vote in favor of a joint resolution setting the statutory limit at the level specified in the budget resolution. The joint resolution is transmitted to the Senate for further action. It may be amended in the Senate to change the debt limit provision or in any other way. If it passes both Houses of the Congress, it is sent to the President for his signature. This method directly relates the decision on the debt limit to the decisions on the Federal deficit and other factors that determine the change in the debt subject to limit. Both methods have been used numerous times.

**Recent changes in the debt limit.**—Major increases in the debt limit were enacted as part of the deficit reduction packages in the Omnibus Budget Reconcili-

<sup>12</sup>The Acts and the statutory limits since 1940 are enumerated in *Historical Tables, Budget of the United States Government*, table 7.3.

ation Acts of 1990 and 1993. Both changes in law were preceded by one or more temporary increases in the limit before agreement was reached on the debt and the deficit reduction measures together. Both increases in the debt limit were large enough to last over two years without a further change in law, the longest times without an increase since the period from 1946 to 1954.

The debt again approached the limit in 1995, and the limit again became part of the larger issue of deficit reduction. During an extended period of dispute between the President and the Congress, the Treasury Department took a number of administrative actions to keep within the limit and the Congress passed two acts providing temporary exemptions from the limit. In March 1996, although agreement had not been reached on deficit reduction, Congress passed the Contract with America Advancement Act of 1996, one provision of which increased the debt limit from \$4,900 billion to \$5,500 billion. The President signed the bill into law on March 29.

During 1997, unlike 1996, the President and the Congress reached agreement on a plan to balance the budget. This included a sufficient increase in the debt limit to accommodate Government finances for longer than possible under the limit enacted in the previous year, even though the amount of debt at that time was considerably under the limit. As a result, the Balanced Budget Act of 1997, which the President signed into

law on August 5, 1997, increased the debt limit to \$5,950 billion.

**Federal funds financing and the change in debt subject to limit.**—The change in debt held by the public, as shown in Table 12–2, is determined primarily by the total Government deficit or surplus. The debt subject to limit, however, includes not only debt held by the public but also debt held by Government accounts. The change in debt subject to limit is therefore determined both by the factors that determine the total Government deficit or surplus and by the factors that determine the change in debt held by Government accounts.

The budget is composed of two groups of funds, Federal funds and trust funds. The Federal funds, in the main, are derived from tax receipts and borrowing and are used for the general purposes of the Government. The trust funds, on the other hand, are financed by taxes or other collections earmarked by law for specified purposes, such as paying social security benefits or grants to State governments for highway construction.<sup>13</sup>

A Federal funds deficit must generally be financed by borrowing, either by selling securities to the public or by issuing securities to Government accounts that

<sup>13</sup> For further discussion of the trust funds and Federal funds groups, see chapter 15, "Trust Funds and Federal Funds."

**TABLE 12–5. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT**

(In billions of dollars)

Description	1998 actual	Estimate					
		1999	2000	2001	2002	2003	2004
<b>Federal funds surplus or deficit (–)</b> .....	<b>–92.0</b>	<b>–110.5</b>	<b>–67.5</b>	<b>–52.7</b>	<b>–17.3</b>	<b>–23.9</b>	<b>–4.0</b>
(On-budget) .....	–91.8	–109.5	–65.7	–50.9	–16.4	–23.7	–3.7
(Off-budget) .....	–0.2	–1.0	–1.8	–1.8	–0.9	–0.2	–0.3
Means of financing other than borrowing:							
Change in: <sup>1</sup>							
Treasury operating cash balance .....	4.7	–1.1	.....	.....	.....	.....	.....
Checks outstanding, etc. <sup>2</sup> .....	–2.8	2.9	–1.6	.....	.....	.....	.....
Deposit fund balances <sup>3</sup> .....	–0.8	–1.7	.....	.....	.....	.....	.....
Seigniorage on coins .....	0.6	0.9	1.0	1.0	1.0	1.0	1.0
Less: Net financing disbursements:							
Direct loan financing accounts .....	–11.5	–25.2	–21.2	–20.1	–19.6	–19.2	–17.7
Guaranteed loan financing accounts .....	–0.5	1.6	0.9	1.8	1.8	1.8	2.0
<b>Total, means of financing other than borrowing</b> .....	<b>–10.2</b>	<b>–22.6</b>	<b>–20.9</b>	<b>–17.3</b>	<b>–16.7</b>	<b>–16.4</b>	<b>–14.7</b>
Decrease or increase (–) in Federal debt held by Federal funds and deposit funds <sup>4</sup> .....	–10.5	–3.1	–8.0	.....	.....	.....	.....
Increase or decrease (–) in Federal debt not subject to limit .....	–0.3	–0.9	–0.9	–1.0	–1.0	–1.3	–1.3
<b>Total, requirement for Federal funds borrowing subject to debt limit</b> .....	<b>112.9</b>	<b>137.1</b>	<b>97.3</b>	<b>71.0</b>	<b>35.0</b>	<b>41.6</b>	<b>20.1</b>
Adjustment for change in discount or premium <sup>5</sup> .....	–1.1	.....	.....	.....	.....	.....	.....
<b>Increase in debt subject to limit</b> .....	<b>111.8</b>	<b>137.1</b>	<b>97.3</b>	<b>71.0</b>	<b>35.0</b>	<b>41.6</b>	<b>20.1</b>
<b>ADDENDUM</b>							
Debt subject to statutory limit <sup>6</sup> .....	5,439.4	5,576.6	5,673.9	5,744.9	5,779.9	5,821.5	5,841.6

<sup>1</sup> A decrease in the Treasury operating cash balance (which is an asset) would be a means of financing the deficit and therefore has a positive sign. An increase in checks outstanding or deposit fund balances (which are liabilities) would also be a means of financing the deficit and would therefore also have a positive sign.

<sup>2</sup> Besides checks outstanding, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.

<sup>3</sup> Does not include investment in Federal debt securities by deposit funds classified as part of the public.

<sup>4</sup> Only those deposit funds classified as Government accounts.

<sup>5</sup> Consists of unamortized discount (less premium) on public issues of Treasury notes and bonds (other than zero-coupon bonds) and unrealized discount on Government account series securities.

<sup>6</sup> The statutory debt limit is \$5,950 billion.

are not within the Federal funds group. Federal funds borrowing consists almost entirely of the Treasury issuing securities that are subject to the statutory debt limit. Trust fund surpluses are almost entirely invested in these securities, and trust funds hold most of the debt held by Government accounts. Very little debt subject to statutory limit is issued for other reasons. The change in debt subject to limit is therefore determined primarily by the Federal funds deficit, which is equal to the arithmetic sum of the total Government deficit and the trust fund surplus.

Table 12-5 derives the change in debt subject to limit (pending social security reform). In 2000 the Federal funds deficit is estimated to be \$67.5 billion, and other factors increase the requirement to borrow subject to limit by \$29.8 billion. The largest other factor (\$21.2 billion) is the direct loan financing accounts. As explained in an earlier section, their net financing disbursements are excluded from the budget by law because they do not represent a cost to the Government, but they have to be financed and they are currently sizable. The next largest factor (\$8.0 billion) is investment in Treasury securities by revolving funds and special funds in the Federal funds group. As a result of all these factors, the debt subject to limit is estimated to increase by \$97.3 billion, in contrast to a \$97.9 billion decrease in debt held by the public.

The budget surplus or deficit equals the sum of the Federal funds surplus or deficit and the trust fund surplus or deficit. The trust funds currently have a large surplus, as they have for a number of years, and it is estimated to grow through 2004. The Federal funds, in contrast, as shown in Table 12-5, continue to have a deficit every year over this period though a sharply declining one. Mainly because of the Federal funds deficit, the debt subject to limit continues to increase every year while the debt held by the public decreases. This can be seen by comparing the annual increase in debt subject to limit in Table 12-5 with the annual decrease in debt held by the public in Table 12-2. In 2004, for example, when the Government has a \$207.6 billion total surplus and the debt held by the public decreases by \$192.9 billion, the debt subject to limit increases by \$20.1 billion. From the end of 1998 to 2004, debt held by the public decreases \$793.5 billion in total while debt subject to limit increases \$402.1 billion. The debt subject to limit remains under the present statutory limit of \$5,950 billion.

### Debt Held by Foreign Residents

During most of American history the Federal debt was held almost entirely by individuals and institutions within the United States. In the late 1960s, as shown in Table 12-6, foreign holdings were just over \$10.0 billion, less than 5 percent of the total Federal debt held by the public.

Foreign holdings began to grow significantly starting in 1970. This increase has been almost entirely due to foreign decisions, both official and private, rather than the direct marketing of these securities to foreign

residents. At the end of fiscal year 1998 foreign holdings of Treasury debt were \$1,216.9 billion, which was 33 percent of the total debt held by the public.<sup>14</sup> Foreign central banks owned 44 percent of the Federal debt held by foreign residents; private investors owned nearly all the rest. All the Federal debt held by foreign residents is denominated in dollars.

Although the amount of debt Federal held by foreign residents grew greatly over this period, the proportion they own, after growing abruptly in the very early 1970s, did not change much again until 1995. During 1995-97, however, foreign holdings increased on average by about \$200 billion each year, considerably more than total Federal borrowing from the public.<sup>15</sup> As a result, the Federal debt held by individuals and institutions within the United States decreased in absolute amount during those years, and the percentage of Federal debt held by foreign residents grew from 19 percent at the end of 1994 to 32 percent at the end of 1997. The rapid growth of foreign debt holdings ceased in 1998 and turned into a slight decline, almost the only year with a decrease since 1970. Because total debt held by the public decreased in 1998, the percentage held by foreigners rose again but by a very small amount.

Foreign holdings of Federal debt are about one-fifth of the foreign-owned assets in the U.S. The foreign purchases of Federal debt securities do not measure the full impact of the capital inflow from abroad on the market for Federal debt securities. The capital inflow supplies additional funds to the credit market generally, which affect the market for Federal debt. For example, the capital inflow includes deposits in U.S. financial intermediaries that themselves buy Federal debt.

### Federally Assisted Borrowing

The effect of the Government on borrowing in the credit market arises not only from its own borrowing to finance Federal operations but also from its assistance to certain borrowing by the public. Federally assisted borrowing is of two principal types: Government-guaranteed borrowing, which is another term for guaranteed lending, and borrowing by Government-sponsored enterprises (GSEs). The Federal Government also exempts the interest on most State and local government debt from income tax; and it insures the deposits of banks and thrift institutions, which themselves make loans.

Federal credit assistance is discussed in Chapter 8, "Underwriting Federal Credit and Insurance." Detailed data are presented in tables at the end of that chapter. Table 12-7 brings together the totals of Federal and federally assisted borrowing and lending and shows the

<sup>14</sup>The amounts of debt reported by the Bureau of Economic Analysis, Department of Commerce, are different, but similar in size, due to a different method of valuing the securities.

<sup>15</sup>Table 12-6 shows foreign holdings increasing by only \$144.6 billion in 1995. However, as explained in footnote 5 to that table, a benchmark revision reduced the estimated holdings as of December 1994 (by \$47.9 billion). Since debt estimates were not revised retroactively, the increase in 1995 was more than the table shows. Before the benchmark revision, the increase was estimated to be \$192.6 billion.

TABLE 12-6. FOREIGN HOLDINGS OF FEDERAL DEBT

(Dollar amounts in billions)

Fiscal year	Debt held by the public			Borrowing from the public		Interest on debt held by the public		
	Total	Foreign <sup>1</sup>	Percent- age for- eign	Total <sup>2</sup>	Foreign <sup>1</sup>	Total <sup>3</sup>	Foreign <sup>4</sup>	Percent- age for- eign
1965 .....	260.8	12.3	4.7	3.9	0.3	9.6	0.5	4.9
1966 .....	263.7	11.6	4.4	2.9	-0.7	10.1	0.5	5.1
1967 .....	266.6	11.4	4.3	2.9	-0.2	11.1	0.6	5.1
1968 .....	289.5	10.7	3.7	22.9	-0.7	11.9	0.7	5.6
1969 .....	278.1	10.3	3.7	-1.3	-0.4	13.5	0.7	5.3
1970 .....	283.2	14.0	5.0	3.5	3.8	15.4	0.8	5.5
1971 .....	303.0	31.8	10.5	19.8	17.8	16.2	1.3	7.9
1972 .....	322.4	49.2	15.2	19.3	17.3	16.8	2.4	14.2
1973 .....	340.9	59.4	17.4	18.5	10.3	18.7	3.2	17.2
1974 .....	343.7	56.8	16.5	2.8	-2.6	22.7	4.1	17.9
1975 .....	394.7	66.0	16.7	51.0	9.2	25.0	4.5	18.2
1976 .....	477.4	69.8	14.6	82.2	3.8	29.3	4.4	15.1
TQ .....	495.5	74.6	15.1	18.1	4.9	7.8	1.2	14.9
1977 .....	549.1	95.5	17.4	53.6	20.9	33.8	5.1	15.0
1978 .....	607.1	121.0	19.9	58.0	25.4	40.2	7.9	19.5
1979 <sup>5</sup> .....	640.3	120.3	18.8	33.2	-0.7	49.9	10.7	21.5
1980 .....	709.8	121.7	17.1	69.5	1.4	62.8	11.0	17.5
1981 .....	785.3	130.7	16.6	75.5	9.0	81.7	16.4	20.1
1982 .....	919.8	140.6	15.3	134.4	9.9	101.2	18.7	18.5
1983 .....	1,131.6	160.1	14.1	211.8	19.5	111.6	19.2	17.2
1984 .....	1,300.5	175.5	13.5	168.9	15.4	133.5	20.3	15.2
1985 <sup>5</sup> .....	1,499.9	222.9	14.9	199.4	47.4	152.9	23.0	15.1
1986 .....	1,736.7	265.5	15.3	236.8	42.7	159.3	24.2	15.2
1987 .....	1,888.7	279.5	14.8	152.0	14.0	160.4	25.7	16.0
1988 .....	2,050.8	345.9	16.9	162.1	66.4	172.3	29.9	17.4
1989 .....	2,189.9	394.9	18.0	139.1	49.0	189.0	37.1	19.6
1990 <sup>5</sup> .....	2,410.7	440.3	18.3	220.8	45.4	202.4	40.2	19.9
1991 .....	2,688.1	477.3	17.8	277.4	37.0	214.8	41.3	19.2
1992 .....	2,998.8	535.2	17.8	310.7	57.9	214.5	39.3	18.3
1993 .....	3,247.5	591.3	18.2	247.4	56.1	210.2	39.0	18.6
1994 .....	3,432.1	655.8	19.1	184.6	64.5	210.6	41.9	19.9
1995 <sup>5</sup> .....	3,603.4	800.4	22.2	171.3	144.6	239.2	54.5	22.8
1996 .....	3,733.0	978.1	26.2	129.6	177.7	246.6	63.6	25.8
1997 .....	3,771.0	1,218.2	32.3	38.2	240.0	250.8	83.7	33.4
1998 .....	3,719.9	1,216.9	32.7	-51.3	-1.2	250.0	91.1	36.4

<sup>1</sup> Estimated by Treasury Department. These estimates exclude agency debt, the holdings of which are believed to be small. The data on foreign holdings are not recorded by methods that are strictly comparable with the data on debt held by the public. Projections are not available.

<sup>2</sup> Borrowing from the public is defined as equal to the change in debt held by the public from the beginning of the year to the end, except to the extent that the amount of debt is changed by reclassification.

<sup>3</sup> Estimated as interest on the public debt less "interest received by trust funds" (subfunction 901 less subfunctions 902 and 903). Does not include the comparatively small amount of interest on agency debt or the offsets for interest on public debt received by other Government accounts (revolving funds and special funds).

<sup>4</sup> Estimated by Bureau of Economic Analysis, Department of Commerce. These estimates include small amounts of interest from other sources, including the debt of Government-sponsored enterprises, which are not part of the Federal Government.

<sup>5</sup> Benchmark revisions reduced the estimated foreign holdings of Federal debt as of December 1978; increased the estimated foreign holdings as of December 1984 and December 1989; and reduced the estimated holdings as of December 1994. As a result, the data on foreign holdings in different time periods are not strictly comparable, and the "borrowing" from foreign residents in 1979, 1985, 1989, and 1995 reflects the benchmark revision as well as the net purchases of Federal debt securities.

trends since 1965 in terms of both dollar amounts and, more significantly, as percentages of total credit market borrowing or lending by domestic nonfinancial sectors. The Federal and federally assisted lending is recorded at the principal amount. It does not measure the degree of subsidy provided by the credit assistance, nor does it indicate the extent to which the credit assistance changed the allocation of financial and real resources. The estimates for GSE borrowing in 1999 and 2000 were developed by the GSEs based on certain assumptions that they made. They are subject to periodic review and revision and do not represent official GSE forecasts of future activity.

The Federal borrowing participation rate trended strongly upward from the 1960s to the early 1990s, though with cyclical variation. Much of the increase in the 1980s was due to higher GSE borrowing as well as Federal deficits. More recently, the Federal borrowing participation rate has declined, falling to nearly 30.0 percent in 1997 and 1998, despite large guaranteed and GSE borrowing. The Federal lending participation rate has been smaller in most years than the borrowing participation rate, primarily because Federal direct loans are ordinarily much smaller than Federal borrowing. In 1998, however, because of the Federal surplus, the lending participation rate was higher.

TABLE 12-7. FEDERAL PARTICIPATION IN THE CREDIT MARKET

(Dollar amounts in billions)

	Actual										Estimates	
	1965	1970	1975	1980	1985	1990	1995	1996	1997	1998	1999	2000
Total net borrowing in credit market <sup>1</sup> .....	66.8	88.2	169.6	336.9	829.3	704.1	705.6	713.7	687.1	933.7	.....	.....
Federal borrowing from the public .....	3.9	3.5	51.0	69.5	199.4	220.8	171.3	129.6	38.2	-51.3	-50.1	-97.9
Guaranteed borrowing .....	5.0	7.8	8.6	31.6	21.6	40.7	26.2	89.9	57.8	58.5	102.1	97.9
Government-sponsored enterprise borrowing <sup>2</sup> .....	1.2	4.9	5.3	21.4	57.9	115.4	125.7	141.5	112.8	293.1	265.3	221.7
Total, Federal and federally assisted borrowing .....	10.1	16.2	65.0	122.5	278.9	376.9	323.2	361.1	208.7	300.3	317.4	221.7
<b>Federal borrowing participation rate (percent) .....</b>	<b>15.1</b>	<b>18.4</b>	<b>38.3</b>	<b>36.4</b>	<b>33.6</b>	<b>53.5</b>	<b>45.8</b>	<b>50.6</b>	<b>30.4</b>	<b>32.2</b>	.....	.....
Total net lending in credit market <sup>1</sup> .....	66.8	88.2	169.6	336.9	829.3	704.1	705.6	713.7	687.1	933.7	.....	.....
Direct loans .....	2.0	3.0	12.7	24.2	28.0	2.8	1.6	4.0	12.8	6.8	14.7	11.1
Guaranteed loans .....	5.0	7.8	8.6	31.6	21.6	40.7	26.2	89.9	57.8	58.5	102.1	97.9
Government-sponsored enterprise loans <sup>2</sup> .....	1.4	5.2	5.5	24.1	60.7	90.0	68.2	161.2	107.9	276.2	306.9	223.1
Total, Federal and federally assisted lending .....	8.3	15.9	26.9	79.9	110.3	133.5	90.4	255.1	178.4	341.5	423.7	332.1
<b>Federal lending participation rate (percent) .....</b>	<b>12.4</b>	<b>18.0</b>	<b>15.9</b>	<b>23.7</b>	<b>13.3</b>	<b>19.0</b>	<b>12.8</b>	<b>35.7</b>	<b>26.0</b>	<b>36.6</b>	.....	.....

<sup>1</sup>Total net borrowing (or lending) in credit market by domestic nonfinancial sectors, excluding equities. Credit market borrowing (lending) is the acquisition (loan) of funds other than equities through formal credit channels. Financial sectors are omitted from the series used in this table to avoid double counting, since financial intermediaries borrow in the credit market primarily in order to finance lending in the credit market. Equities, trade credit, security credit, and other sources of funds are also excluded from this series. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

<sup>2</sup>Most Government-sponsored enterprises (GSEs) are financial intermediaries. GSE borrowing (lending) is nevertheless compared with total credit market borrowing (lending) by nonfinancial sectors, because GSE borrowing (lending) is a proxy for the borrowing (lending) by nonfinancial sectors that the GSEs assist through intermediation. The GSEs assist the ultimate nonfinancial borrower by purchasing its loans from the initial, direct lender or by other methods, which they finance by issuing securities themselves in the credit market. Borrowing and lending include mortgage-backed securities, because the GSEs assist nonfinancial borrowers through this type of intermediation as well as by types of intermediation that involve financial instruments recognized on the GSEs' balance sheets. The data for this table are adjusted, with some degree of approximation, to remove double counting in calculating a consolidated total for Federal and federally assisted borrowing (lending). GSE borrowing and lending are calculated net of transactions between components of GSEs and transactions in guaranteed loans; GSE borrowing is also calculated net of borrowing from other GSEs and purchases of Federal debt securities.